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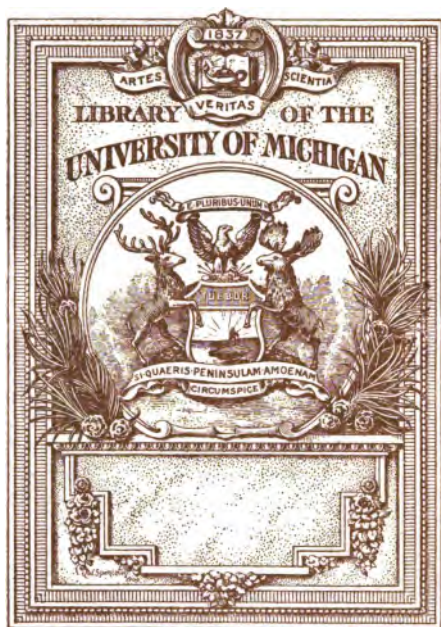
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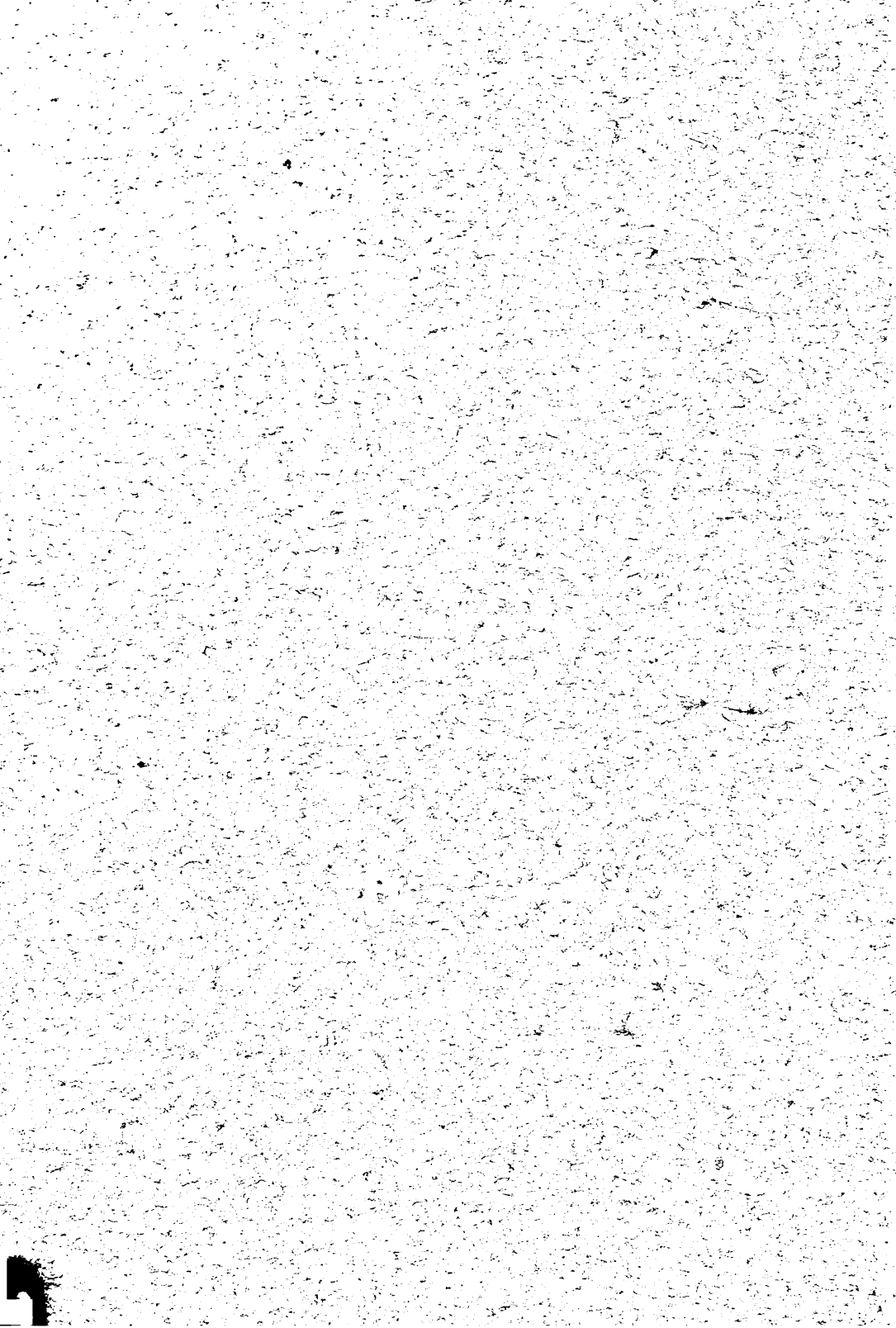
REVISED EDITION

# THE ADVANCE IN FREIGHT RATES

FROM JUNE 30  
1890  
TO JUNE 30  
1903

BEING A REVIEW  
OF  
SENATE DOCUMENT No. 257

BY SLASON THOMPSON  
CHICAGO  
1904



# The Advance in Freight Rates

From June 30, 1899  
to  
June 30, 1903



Being a Review  
of  
Senate Document No. 257

By SLASON THOMPSON  
CHICAGO  
1904

## NOTE TO REVISED EDITION.

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Since the first edition of this Bulletin was printed the Interstate Commerce Commission has issued a summary of its final report on the Statistics of Railways in the United States for the year ending June 30, 1903.

As such summary merely emphasizes the undue haste of the Commission in transmitting an incomplete and misleading report to the United States Senate while verifying the statements and confirming the conclusions of this review, as based on the Commission's preliminary report, it has been deemed best to let the original text stand with some verbal corrections and a few notes giving the final figures.

In response to a general request the text of Senate Document No. 257 is given in Appendix A, with an addenda to Part II thereof from data furnished in the Commission's final Report, which contains the information the Senate was seeking in a nutshell.

S. T.

August 6, 1904.



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## INTRODUCTORY.

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Reclass. 5-16-30 A.V.M.

If an enemy to the legitimate exercise of all the powers conferred on the Interstate Commerce Commission under the "Act to Regulate Commerce." approved February 4, 1887, had conspired to discredit the present Commission it would have exhausted the ingenuity of his hostility to invent any weapon better calculated to accomplish that end than Senate Document No. 257.

5-11-6-05

As an example of the lengths to which an untempered thirst after powers Congress cannot constitutionally delegate may tempt an official body it affords a striking illustration of that "vaulting ambition" that falls on the other side.

To test the motives and methods of this amazing public document by the light of facts largely drawn from the Commission's own statements and statistics is the object of the following pages. As a clear comprehension of what was required by the United States Senate and what was not returned by the Interstate Commerce Commission is necessary to a full realization of the imposition sought to be practiced on the Senate and the American people, a brief history of document No. 257 precedes its analysis.

## HISTORY OF SENATE DOCUMENT NO. 257:

January 13th last, presumably at the suggestion of the Interstate Commerce Commission in furtherance of its campaign to obtain autocratic control of American railway transportation, Senator Quarles introduced in the United States Senate and asked the present consideration of the following resolution:

Resolved, That the Interstate Commerce Commission is hereby directed to furnish the Senate, as speedily as may be practicable, a report showing the principal changes in railway tariff rates, whether resulting from the adoption of new rates or the amendment of freight classifications, and an estimate of the effect of such changes upon the revenues of railway corporations in the United States during each of the fiscal years ending June 30, 1900, 1901, 1902 and 1903, as compared with the revenue that would have been derived by them under the rates and freight classifications in force during the fiscal year ending June 30, 1899. And that said Commission also include in said report such estimate as may be practicable of the effect of such changes in rates and freight classifications upon the revenues of said railway corporations derived from the transportation of leading commodities, for example, iron and steel articles, coal, lumber, grain, flour, hay, and sugar, during the periods above mentioned.

On the objection of Senators Gallinger and Kean the resolution went over under the rule.—Vide Congressional Record 58th Congress, Second Session, page 794.

January 25th, on motion of Senator Quarles, by unanimous consent, the resolution was referred to the Committee on Interstate Commerce. *Ib.*, p. 1166.

March 11th, Senator Elkins, chairman of the committee, reported the resolution with amendments, which made it read as follows:

Resolved, That the Interstate Commerce Commission is hereby directed to furnish the Senate, as speedily as may be practicable, a report showing the principal changes in railway tariff rates, whether resulting from the adoption of new rates or the amendment of freight classifications, and an estimate of the effect of such changes upon the gross and net revenues of railway corporations in the United States during each of the fiscal years ending June 30, 1900, 1901, 1902 and 1903, as compared with the gross and net revenue that would have been derived by them under the rates and freight classifications in force during the fiscal year ending June 30, 1899; and also report the changes in cost of operation and maintenance of said railways for said years.

The amendment made by the committee inserted the words "gross and net" twice where they occur in the resolution as adopted, and substituted the sentence in italics for that portion of the original resolution after words "June 30, 1899," relating to the effect of changes in railway tariff rates on railway revenues from "iron and steel articles, coal, lumber, grain, flour, hay and sugar, during the period named."

The amended resolution showed the intention of the Senate to confine its inquiry to the actual facts as disclosed in the returns of gross and net revenues. In reply to Senator Hoar, who asked whether the Interstate Commerce Commission was to give its opinion "as to the probable cost of the changes?" Senator Cullom said:

"That part of the resolution the committee struck out." *Ib.*, page 3261.

April 9th the reply of the Interstate Commission to the resolution of March 11th was laid before the Senate. This included a statement prepared by the auditor of the Commission dated March 24th, "showing the principal changes in rates caused by changes in freight classifications and the advances in rates on a number of specified commodities." The reply with the accompanying papers were referred to the Committee on Interstate Commerce, and order to be printed. *Ib.*, page 4745.

This reply, the statement of Auditor Smith and the accompanying tables constitute Senate Document No. 257, which appears as Appendix A hereto.

### **A CUT AND DRIED REPLY TO THE REJECTED RESOLUTION.**

The form and dates of the Commission's reply prove that it was prepared in anticipation of the introduction of Senator Quarles' resolution to which it is responsive and not to the carefully limited resolution adopted by the Senate. Where this directed the Commission to furnish certain information "as speedily as may be practicable" the Commission was in such indecent haste to publish what it had already prepared that it omitted to furnish material facts in its possession or accessible within the early practicable purview of the resolution.

The Senate resolution calls for "an estimate of the effect of such changes upon the gross and net revenues of railway corporations in the United States," and yet the Commission confines itself to a one sided estimate of "what the gross revenue of the railways would have been if the average per ton received by all the railways in the fiscal year 1899 had been applied to

the tonnage carried over such railways in the succeeding fiscal years to and including 1903."

True, Document No. 257 admits that "no similar calculation can be made respecting net revenue," because "the net revenue depends not merely upon the gross earnings, but also upon the cost of operation, which may be varied by numerous conditions, including density of traffic, as well as the aggregate tonnage."

The document further says, "From what has been stated it must appear that no accurate or even approximate estimate of the actual effect of specific changes in rates upon the revenues of the carriers can be made."

Notwithstanding this admission, Chairman Knapp submitted a statement, which he was pleased to say was "not without value as indicating enormous additions in recent years to the cost of railway transportation to the people of the United States" And he concluded by transmitting a table (Part II) prepared by Auditor Smith giving a summary of the gross earnings, operating expenses, ratio of operating expenses to earnings, mileage operated, etc., of the railways in the United States, for the years ending June 30, 1899, 1900, 1901 and 1902."

To be of any contemporaneous value to the Senate this table should have included the returns to June 30, 1903, as required by the resolution. Chairman Knapp sought to excuse their omission by saying:

"The returns for the fiscal year 1903 have not yet been compiled, and the figures relating to the cost of operation and maintenance for that year must therefore be omitted from this report."

The value as well as veracity of this excuse may be inferred from the fact that last December, three days in advance of its submission to Congress, the Interstate Commerce Commission issued its "Preliminary Report on the Income and Expenditures of Railways for the Year ending June 30, 1903." This preliminary report forms part of the Seventeenth Annual Report of the Commission (page 107) and includes the following sentences relating to items specifically named in the title of Part II of the Senate Document No. 257:

"The gross earnings of the railways for the year ending June 30, 1903, on the mileage stated were \$1,890,150,679. The gross earnings for the preceding year on 200,154.56 miles as shown in the final report, were \$1,726,380,267.

"This preliminary report shows that the operating expenses of the railways covered therein amounted to \$1,248,520,483."\*

\*The final report places the gross earnings at \$1,900,846,907, and the operating expenses at \$1,257,538,852.

"The ratio of operating expenses to earnings was 66.05 per cent., being somewhat greater than for the previous year."

"This report for the past fiscal year embraces returns received by November 30th, for 677 operating lines, representing a railway mileage of 201,457.14 miles or about 98 per cent. of that which will be covered by the complete and final report for the year."

In fact, the preliminary report for 1903 covered within 1,014.71 miles or one-half of one per cent. of the mileage covered in the final report for 1902.

That this omission of the returns of earnings, expenses, their relative percentage and the mileage for the fiscal year 1903, was part of a deliberate purpose to mislead the United States Senate, and, indirectly, the American people, is exposed by several statements in the report of Auditor Smith founded on the very returns the letter of transmission said had "not yet been compiled."

On page 4 of Document No. 257 appears a table containing the "total number of tons of freight carried," "total freight revenue" and "average rate" for the year ending June 30, 1903, the figures representing "about 98 per cent of the total operated mileage."

On page 5 Auditor Smith goes into an elaborate estimate based on the figures just mentioned by which he seeks to show that the changes in rates between 1899 and 1903 account for \$155,475,502 increase in railway revenues, his whole guess being predicated on the uncompiled average rate per ton in 1903.

Such tergiversation, such inclusion of facts to support a preconceived contention, such deliberate suppression of material facts that would controvert that contention can only escape censure where it escapes observation. The United States Senate asked for plain facts, it has been given a stone in the shape of a wild guess at the effect of changes in freight rates.

### THE COMMISSION'S ANIMUS.

But why should the Interstate Commerce Commission seek to avoid giving the net revenues of the railways and their operating expenses for 1903?

The answer is simple. In the ratio of operating expenses to earnings lies the real kernel of the Senate's quest. Document No. 257 gives the gross earnings but deliberately holds back the information as to operating expenses, which provided the means of calculating that ratio, and showed that in spite of all changes in rates and increased gross earnings the cost of

operating and maintaining the railways was proportionately greater in 1903 than any time since 1897. (4)

Senate Document No. 257 shows that the increase of gross earnings per mile 1902 over 1901 was 8.68 per cent., and that the increase of operating expenses per mile 1902 over 1901 was 8.33 per cent. The preliminary report for 1903 shows that the gross earnings per mile were \$9,382, or an increase over 1902 of 8.77 per cent., while the operating expenses per mile were \$6,197, or an increase over 1902 of 11.1 per cent., thus establishing the ratio of operating expenses to gross earnings of 66.05 per cent. for 1903.

The fluctuation of this ratio as well as the gradual decline in the railway revenue per passenger and per ton mile is shown in the following table compiled from the Interstate Commerce Commission's own reports:

	Passenger, per mile, Cents	Ton of Freight, per mile, Cents	Percentage of Operating Expenses to Operating Income
1888. . . . .	2.349	1.001	65.34
1889. . . . .	2.165	.922	66.81
1890. . . . .	2.167	.941	65.80
1891. . . . .	2.142	.895	66.73
1892. . . . .	2.126	.898	66.67
1893. . . . .	2.108	.878	67.82
1894. . . . .	1.986	.860	68.14
1895. . . . .	2.040	.839	67.48
1896. . . . .	2.019	.806	67.20
1897. . . . .	2.022	.798	67.06
1898. . . . .	1.973	.753	65.58
1899. . . . .	1.925	.724	65.24
1900. . . . .	2.003	.729	64.65
1901. . . . .	2.013	.750	64.86
1902. . . . .	1.986	.757	64.66
1903. . . . .	.....	.....	66.05*

How important is the increase of 1.39 per cent. in the ratio of operating expenses to earnings which the Commission's statistician dismisses so airily as "being somewhat greater than for the previous year," may be judged from the same statistician's remarks on far slighter changes in previous reports. Commenting on a decrease of only 0.20 per cent. in 1902, Henry C. Adams, official statistician to the Commission, said:

The ratio of operating expenses to operating income is one of the most significant facts to be derived from railway statistics. It suggests to the financier the degree of success which attends the operation of railway properties. Statistics of Railways, 1902, p. 90. ✓

\*The final report increases the ratio of operating expenses to earnings to 66.16 per cent.

In his report for 1901 when there was an increase of only 0.21 per cent. Mr. Adams went fully into the subject as follows:

A single remark will be submitted upon the ratios presented above. The percentage of operating expenses to operating income in 1891 was 66.73 per cent.; for the year covered by this report it is 64.86 per cent. The difference may be said to represent the margin of financial improvement as between two years placed in comparison. The significance of this apparently slight margin of improvements will be appreciated when it is observed that on the basis of the gross earnings for the year ending June 30, 1901, it results in placing at the disposal of the railways over \$29,000,000 in excess of what would have been placed at their disposal had the ratio of operating expenses to operating income of the year 1891 been continued. This fund, capitalized at the average rate of dividend paid upon stock, would warrant an increase in the valuation of railway property of over \$500,000,000. (Statistics of Railways, 1901, p. 89. ✓

Applying the formula of the ingenuous Mr. Adams to the increase of the ratio in question for the year 1903 by 1.39 per cent. it will be found that it resulted in reducing the funds at the disposal of the railways \$26,273,000 from what they would have been had the ratio of operating expenses to operating income of the year 1902 been maintained.

It is unfortunate that the significance of such figures only appeals to the Interstate Commerce Commission when it can be interpreted to mean that railways are making excessive profits.

The two columns of figures given above, showing the steady decrease in railway revenue per passenger mile and the more marked decline in revenue per ton mile, convey their own commentary on all attempts to show that the railways are prospering at the expense of the public through advancing rates. In 1895, speaking of the decline in the average revenue per ton per mile to .839 per cent. to that date, Statistician Adams said: "Should the rate per ton mile of 1890 have been received for the freight traffic of 1895, the freight revenue of the railways would have been \$86,932,066 in excess of the amount actually received."

Similarly, should the rate per ton per mile of 1890 have been received for the freight traffic of 1903 (assuming that the average haul was 131 miles the same as in 1902), the freight revenue of the railways in 1903 would have been \$187,306,206 in excess of the amount actually received.

I am advised, however, that the Commission's estimate of the freight ton mileage for 1903 is 172,910,509,348 and the estimated revenue per ton mile was .762 cents. \*In which case if

\* The final report gives the total ton mileage as 173,222,278,993, and the revenue per ton mile as .763 cents.

the tonnage of 1903 had been carried at the average rate per ton per mile of 1890 the total freight revenue for 1903 would have been \$309,509,811 in excess of what the Commission says was received.

In 1895 Statistician Adams was so alarmed over the remission of "an annual charge in excess of \$100,000,000 for railway passenger and freight service" by the reason of the reduction in rates per passenger and ton mile that he concluded his comments in the following terms:

It would seem that the railways would sooner or later be forced to observe the requirements of the interstate commerce act as a means to preserve the property placed under their control.

In 1895 the Interstate Commerce Commission was in terror lest the railways should ruin their property by reducing rates. In 1904 it seeks to mislead the Senate and inflame the public mind by misrepresenting the extent and effect of changes in rates which the railways deemed necessary to preserve the property under their control!

#### ANALYSIS OF AUDITOR SMITH'S STATEMENT.

Now let us examine the affirmative information which the Interstate Commerce Commission had prepared in anticipation of the Senate inquiry. It will be noted that the resolution calls for "a report showing the principal changes in railway tariff rates whether resulting from the adoption of new rates or the amendment of freight classifications." The first exhibit of the Commission consists of the following blind table purporting to give the advance in ratings in the territory north of the Potomac and Ohio rivers and east of the Mississippi river and Lake Michigan, effective January 1, 1900, by reason of Official Classification No. 20:

RATINGS	ADVANCED	
	From Class	To Class
289	4	3
155	3	2
71	6	5
25	2	1
15	5	4
8	1	1½
5	1	D-1
2	1½	D-1
1	D-1	2½
1	4	2
572		



This table is merely a revamping of one on the same subject to be found on page 15 of the annual report of the Commission for the year 1900. But it is important because of the confession that the earlier statement, which claimed that 818 of the changes effected by Classification No. 20, "produced an advance and six a reduction in the rate," contained 30 per cent. of duplications, so that the changes numbered only 572 advances and six reductions.

The Commission's reply admits that "most of the articles" advanced in the above table from 4th to 3rd class were reduced by 20 per cent. and "most articles" advanced from 3rd to 2nd were reduced by 15 per cent. by the supplemental classification of March 10, 1900.

As a matter of fact, the supplement to Official Classification No. 20 made a reduction of 20 per cent. on no less than 294 articles in the 3rd class and 15 per cent. on 170 articles in the 2nd class, thus covering 20 more articles than the ratings raised to 3rd and 2nd classes, as shown in the above table.

In another supplement to Classification No. 20, effective March 10, 1900, out of the 52 changes no less than 38 are reductions in class or conditions of shipment.

Supplement 4 to Classification No. 20, effective April 15, 1900, made reductions of 15 per cent. on 29 articles in the 2nd class out of 32 changes.

Since 1899, the records of the Official Classification office show 2,551 changes divided between advances and reductions in the following classifications:

Effective	Advances	Reductions
No. 20, Jan. 1, 1900. . . . .	660	565
" 21, Jan. 1, 1901. . . . .	67	148
" 22, Jan. 1, 1902. . . . .	327	182
" 23, Jan. 1, 1903. . . . .	93	110
" 24, June 1, 1903. . . . .	373	26
	<hr/> 1520	<hr/> 1031

These figures include advances and reductions in minimum carload weights, without changes in rates, because the revenues of the carriers are increased or decreased thereby.

The net effect of these changes has been to produce considerably more revenue for the railways from the articles affected. But as they averaged an increase of less than 15 per cent. on less than one-fifth of the 8,000 articles included in Classification No. 24, it is clear, numerically speaking, that in the aggregate the changes in classification would not have netted the railways more than an increase of three per cent. in

their total revenues. And as the railways in the official classification territory only account for 44 per cent. of the gross earnings from the freight traffic of all the railways the total increase in revenue from all these changes would have amounted to about 3 per cent. on 44 per cent. of \$1,335,768,581 (earnings from freight service for 1903, vide, Preliminary Report, p. 8), or approximately \$18,000,000.\*

That these figures over estimate if anything the actual increase by reason of any changes in classification is probable, because none of the advances made affect such leading commodities as coal, plaster, stone, cement, drain tile, grain, grain products, sand, lumber, ice and paper.

Turning next to what Auditor Smith has to say of the changes in the territories covered by the Southern and Western classifications, it need only be said that neither he nor the Commission took the trouble to more than paraphrase the terms in which these changes were stated in the Commission's annual report for 1900, as appears from the following extracts:

Annual Report, 1900, p. 15.

On January 1, 1900, Southern Classification No. 25 was in effect. Since then three classifications have been filed, namely: No. 26 effective February 1; No. 27 effective June 1, and No. 28 effective November 10. Comparing the last with No. 25, we find as a net result 636 changes since January 1, of which 531 worked an advance and 105 a reduction in rates.

Auditor Smith, March 24, 1900.  
Document 257, page 3.

Prior to February 1, 1900, Southern Classification No. 25 had been for some time in force. There were three issues of this classification during the year 1900, namely: No. 26 effective February 1, No. 27 effective June 1; and No. 28 effective November 10. By comparing the last number with No. 25 it was found that 636 changes were made during the year, of which 531 were advances and 105 were reductions in rating.

On January 1, 1900, Western Classification No. 29 was in effect. Classification No. 30 was made effective January 25. By that 257 changes in rating were made, of which 240 were advances and 17 reductions.

Western Classification No. 30, which became effective January 25, 1900, superseding No. 29, which took effect July 1, 1899, made 257 changes in rating, of which 240 were advances and 17 were reductions.

Auditor Smith adds that "a number of issues of each of the classifications referred to have been made since the year 1900, but the changes made in such issues were comparatively few and were not of such importance as to deserve special notice."

Whether the Senate is any the wiser for Mr. Smith's bold statement of the number of changes in 1900 without an inkling of the articles and ratings affected may safely be left to the Senate.

In passing, it may be said that the Southern Classification relates to territory south of the Ohio and Potomac rivers and east of the Mississippi river; while the Western Classification

\* The final report gives the freight revenue for 1903 as \$1,338,020,026.

governs the territory west of the Mississippi river and applies on traffic between Chicago, Peoria and certain other points east of the river and points west thereof.

### WHAT THE FACTS ARE.

When an examination of Official Classification No. 20 shows that it changed only 7 per cent. of the 8,000 and odd articles mentioned in that issue and that these changes related almost wholly to less than carload rates; and when it is notorious that the great bulk of railway freight is carried by the carload, the impossibility of arriving at any trustworthy conclusion as to the effect of such reclassification on the earnings of the railways is apparent.

As bearing, however, upon Mr. Smith's statement that the changes made since the issue of the Southern Classification Committee mentioned by him "were comparatively few" and did not "deserve special notice," it may be stated that Chairman McGovern of that committee reports the following changes in classification for the years in question:

	Reductions	Per Cent	Advances	Per Cent
Year 1901 .....	112	81.8	25	18.2
Year 1902 .....	136	92.5	11	7.5
Year 1903 .....	112	83.	23	17.
	<hr/> 360	<hr/> 85.9	<hr/> 59	<hr/> 14.1

For the information of the Senate it should also be stated that the Southeastern Freight Association during the period covered by the Senate inquiry issued rate sheets showing the following changes:

	Advances	Reductions
Year ending March 31, 1900 .....	524	1,047
April 1 to Feb. 4, 1901 .....	428	990
Feb. 4, 1901, to Feb. 28, 1902 .....	381	1,264
Year ending Feb. 28, 1903 .....	400	1,469
	<hr/> 1,733	<hr/> 4,770

Of the changes it will be noted that 73.3 per cent were reductions, while only 26.7 per cent. were advances.

Similar statistics kept by the Southeastern Mississippi Valley Association show the following changes:

	Advances	Reductions
1900 .....	130	580
1901 .....	130	780
1902 .....	195	1,020
1903 .....	419	992
	<hr/> 874	<hr/> 3,372

In this territory it will be observed that 79.4 per cent. of the changes were reductions and only 20.6 per cent. were advances.

Moreover, it should not be overlooked that in the territory covered by these associations there have been a number of very important reductions in rates on coal during the period under discussion.

During the years 1900, 1901, 1902 and 1903 the Central Freight Association, headquarters in Chicago, issued 2,600 information circulars applying from and to points within its territory and 695 circulars applying its rates to points east of western termini trunk lines. Of these 3,295 circulars 95 per cent. related to reductions in rates and only 5 per cent. to advances.

In Appendix B is given a recapitulation of the changes in freight rates on the Atlantic Coast Line Railroad during the four years ending June 30, made by Third Vice-President Emerson of that road, which will assist the Senate to appreciate how superficial and misleading is that part of Auditor Smith's statement relating to the changes in the Southeastern territory.

Before dismissing this phase of the question it should be understood that it is not known and cannot be known with prescient certainty whether net receipts are more favorably affected by advancing or reducing rates. Higher rates may restrict volume to unremunerative proportions; the volume stimulated by low rates may more than make up for the loss per ton, or the expense of operation may be increased beyond the point where the low rate is remunerative.

Every change in rates therefore involves more or less of an experiment and the lessons of experience do not always make satisfactory reading in annual reports, either for the railways or the public.

### SOME UNWARRANTED ASSUMPTIONS.

In order to lay the foundation for his estimate that the railway revenues from freight was increased during the fiscal year 1903 by \$155,475,502 over what they would have been under the rates prevailing in 1899, Auditor Smith in Document No. 257 presents the following statement:

Year ending June 30	Tons of Freight Carried	Total Freight Revenue	Average Rate per Ton
1899 . . . . .	959,763,583	\$ 913,737,155	\$0.9520
1900 . . . . .	1,101,680,238	1,049,256,323	.9524
1901 . . . . .	1,089,226,440	1,118,543,014	1.0269
1902 . . . . .	1,200,315,787	1,207,228,845	1.0058
1903 . . . . .	1,221,475,948	1,318,320,604	1.0793

That these figures of average rates per ton cannot be accepted as authoritative appears from the fact that they do not coincide with those given by the Commission's statistician in his annual report, as follows:

Year	Senate Document No. 257	Statistician's Report Average Rate	Page
1899 .....	\$0.9520	\$0.97131	96
1900 .....	.9524	.97530	95
1901 .....	1.0269	1.05116	91
1902 .....	1.0058	1.03219	93
1903 .....	1.0793	.....	.....

The discrepancy between the auditor's and the statistician's average rate per ton in 1902 is as inexplicable as it is destructive of all conclusions drawn therefrom. But it is not as amazing as that the official auditor of the Interstate Commerce Commission, departing from its usual practice of using the average revenue per ton per mile as the basis for comparison, should from such average rates presume to credit an increase of \$155,475.502 in 1903 to "an advance in freight rates and classifications."

The auditor utterly confounds the average revenue per ton received by the railways with the average rate charged without making any allowances for the ever varying nature of the service in the relative quantities, qualities and conditions of the things transported and the length of the haul of different commodities.

If reference is had to the table showing the revenue per ton of freight per mile (page 8 of this review), it will be perceived that no such eccentric fluctuation of average rate is shown as in Mr. Smith's statement—the difference between the rate per ton per mile in 1899 and 1902—being only .033 of a cent.

But if Auditor Smith's averages given above prove anything it is that the effect of changes in rates cannot be even approximately traced in the average revenue per ton. Otherwise how comes it that in those for 1900, including six months under Official Classification No. 20 and two months unaffected by the reduction of March 10, 1900, there was only an advance of .04 of a cent per ton, while for the year 1901, all under Classification No. 20 as reduced March 10, 1900, the average advance is figured at 7.49 cents per ton, and for 1902 at 5.38? As Senate Document No. 257 does not contain any reference to a change in classification later than March 10, 1900, for the Official Classification territory, November 10, 1900, in the Southern Classification territory and January 25, 1900, in the Western Classification territory, until "the beginning of the year 1903," it is undeniable that these fluctua-

*the consolidation of rates would reduce the no. of ton reported and hence reduce the av. rate per ton.*

tions in the average revenue must have been almost wholly due to other causes than the changes in freight rates.

Auditor Smith tries to account for the decrease in the average rate between 1901 and 1902 by saying that it "appears to be due to a large increase in low-grade tonnage in 1902 over the preceding year." This introduces a factor into the calculations which demolishes the entire fabric of his estimate as to the effects of changes in rates. If by an increase or decrease of the proportionate tonnage of a leading commodity he can alter the average per ton so as to account for \$25,000,000 of annual revenue the absurdity of an estimate based on rates and classifications affecting minor commodities is manifest.

Auditor Smith also indulges in the dangerous liberty of generalizing "that there is a constant tendency toward an increase in the percentage of tonnage of low-grade freight, so that if there had been no advances in rates or classifications since the year ending June 30, 1899, it is safe to say that the average rate per ton for each of the subsequent years would have been much less than for that year."

To the student of such matters the reverse of this would seem to follow the natural tendency of all manufacturers to get next to the source of the natural products, and of great centers to call for the transportation of high class freight. This contradiction of Auditor Smith's generalization is borne out by the following table, showing the percentages of the freight movement of the principal commodities originating on line of operating road for the years in question, taken from the annual reports of the Interstate Commerce Commission for the respective years:

Products of	1899	1900	1901	1902
Agriculture . . . . .	11.33	10.33	10.76	9.23
Animals . . . . .	3.12	2.87	2.97	2.64
Mines . . . . .	51.47	52.59	51.67	52.36
Forest . . . . .	10.89	11.61	11.67	11.64
Total low grade commodities	76.81	77.42	77.01	75.87
Manufactures . . . . .	13.45	13.41	13.75	14.49
Merchandise . . . . .	4.49	4.26	4.16	4.37
Miscellaneous . . . . .	5.25	4.91	5.08	5.27
Total higher commodities grade	23.19	22.58	22.99	24.13

It will be perceived that these percentages not only refute Mr. Smith's generalization, but they disprove his specific assumption that "the falling off in average rate per ton appears to have been due to a large increase in low-grade tonnage in

1902 over the preceding year." Actually there was a decrease of 1.14 per cent. in low-grade commodities that year and a corresponding increase in the high-class freight.

This increase in the percentage of the tonnage of manufactures, merchandise and miscellaneous freight in itself is sufficient to account for the advance in the average revenue per ton even though there had been no change in classifications and rates in 1900.

### MISSTATEMENTS AS TO RECEIPTS FROM HAY.

Auditor Smith attempts some special calculations as to the effect of changes in the rates for hay, sugar, iron and steel articles, coal, and lumber. As the advances on all except the hay and sugar were made in the last six months of the fiscal year 1903 (that on lumber late in June) their effect on the aggregate for the year must have been slight and remains a matter of guess work.

As to hay the very particularity of his estimate furnishes the means for its disproof. He assumes that the change of hay from 6th to 5th class, amounting to \$1 a ton between Chicago and New York, would be equivalent to an average of 80 cents per ton in the Official Classification territory. He next presents the following table of the tonnage of hay reported for the years named:

	Tons
1900 . . . . .	4,112,092
1901 . . . . .	4,086,700
1902 . . . . .	4,681,509
1903 . . . . .	not available..

As "about 65 per cent. of the total tonnage carried by the railroads of the United States is carried in the territory governed by the Official Classification," Mr. Smith finds that in 1902 3,042,980 tons of the tonnage of 1902 paid an advance of 80 cents per ton on the 1899 rate. This would be \$2,434,384. From which he concludes that the increase in revenue on hay for four years due to the changes of classification in January, 1900, was "nearly \$10,000,000."

Aside from the discrepancies creeping into this calculation by including six months before Classification No. 20 went into effect, and unavailable figures for 1903, besides using the largest annual tonnage for his multiplicand Auditor Smith is widely astray in his estimate that 65 per cent. of the hay in the United States is carried in Official Classification territory and that 80

cents is the average increase in that territory deducible from an increase of \$1 per ton on the standard haul.

While Mr. Smith is right in saying that about 65 per cent. of the total tonnage of American railroads originating on the line of reporting roads is carried in Official Classification territory, he overlooks the fact that the proportion of "Products of Agriculture," of which hay of 1902 constituted only 8.7 per cent. carried in that territory was only 32.65 per cent. as appears from the following statement from page 69 of Statistics of Railways, 1902:

Territory	Products of Agriculture	
	Tons Originating on Line	Per Cent
Official classification .....	17,540,131	32.65
Southern " .....	5,934,923	11.55
Western " .....	30,248,061	56.30
Total products of Agriculture .....	53,723,115	100.00

The estimate of 80 cents as the average increase per ton on hay is equally wide of the mark and the Interstate Commerce Commission itself is responsible for transmitting such a gross exaggeration to the Senate. In the case of the National Hay Association versus Lake Shore and Michigan Southern Railroad Company et al., the Commission had before it sworn testimony of expert witnesses that the average increase upon all the hay hauled in the territory is not more than two cents a hundred or 40 cents a ton, owing to the fact that hay is not usually hauled the maximum distance—the average haul being considerably under the middle figure.

Reconstructed in the light of these conditions, Auditor Smith's formula on hay would read:

32.65 per cent. of 4,681,509 tons equals 1,528,512.

1,528,512 tons at 40 cents equals \$611,404.

\$611,404 x  $3\frac{1}{2}$  years equals \$2,139,914.

Auditor Smith's estimate "nearly \$10,000,000."

Auditor Smith's error nearly \$7,860,086.

In his estimate as to the increased revenue from sugar Mr. Smith does not err so wildly on the percentage of tonnage affected, but he is as far astray as ever in his guess that the rate has been increased an average of 80 cents per ton.



## SUPPRESSION OF AVAILABLE FACTS.

No more significant proof of the hostile animus of Document No. 257 toward the railways could be given than its evasive treatment of the Senate's request "to report the changes in cost of operation and maintenance of said railways for said years." In Part II of the appendix to Document No. 257 it presents a summary of gross earnings, operating expenses, ratio of operating expenses, mileage operated, etc., for the fiscal years 1899, 1900, 1901 and 1902, omitting 1903 because, as Chairman Knapp says in transmitting the report, "The returns for the fiscal year 1903 have not yet been compiled."

Strangely enough those returns have been compiled sufficiently to be included as a "preliminary report" in the annual report of the Commission to Congress last December, showing the following facts for 98 per cent of all the railway mileage in the United States:

	Year Ending June 30, 1903
Mileage .....	201,457.14
Gross Earnings .....	\$1,890,150,679
Earnings from passenger Service .....	506,683,009
Per cent of total .....	26.91
Earnings from Freight Service .....	1,335,768,581
Per cent of total .....	70.67
Earnings from various sources .....	45,699,089
Per cent of total .....	2.42
TOTAL OPERATING EXPENSES .....	1,248,520,483
PERCENTAGE EXPENSES TO EARNINGS .....	66.05
NET EARNINGS FROM OPERATING .....	641,630,196
Income from other sources .....	93,079,239
"Total Income" .....	734,709,435
Aggregate deductions, including interest on funded debt, rents of leased lines, permanent improvements charged to income, dividends and taxes (which were \$52,960,004) .....	*643,546,723
Dividends included in deductions, .....	159,310,010

These "unavailable" figures cover practically everything given in the summary Part II to Document No. 257 except the distribution of operating expenses and show the following absolute and relative increase over the figures for the fiscal year 1899:

\* The final report increases the deductions for taxes to \$57,849,569.

	Absolute Increase 1903 over 1899	Increase Per Cent
Mileage .....	\$ 13,923	7.4
Gross earnings .....	576,540,561	43.8
Earnings Passenger service ..	145,127,578	40.1
Freight .....	417,769,622	45.5
various sources. ....	11,708,149	34.4
OPERATING EXPENSES.....	391,551,484	45.7
Net earnings from operation .....	184,989,077	40.5

As above pointed out, the preliminary report expressly shows the gross earnings and operating expenses per mile for 1903, which can readily be compared with the corresponding final figures for 1902.

It is unfortunate, to say the least, that "the preliminary report on the income and expenditures of the railways for 1903," which could not have been made without their compilation, does not give the detail of the four accounts which make up the operating expenses, to wit: maintenance of way and structure, maintenance of equipment, conducting transportation, and general expenses, and that it also fails to give the items included in "Aggregate Deductions."

1897 — With these suppressed facts in its possession the Senate and its Committee on Interstate Commerce would have been in a position to form an intelligent judgment, not only as to any possible effect of changes in rates and classifications, but as to the essential necessity for a revision of tariffs to enable the railways to meet the swelling demands of traffic without going into bankruptcy. In 1899 the railways of the United States were only beginning to recover from the paralysis of all business throughout the country in 1894, evidenced in their case by the fact that in 1895, 1896 and 1897 more than 70 per cent. of their capital stock paid no dividends. In 1899 59.39 per cent. still paid no dividends and 10.45 per cent. of the funded debt paid no interest. Moreover, forced economies of the hard years had left the railways illy equipped to handle the rush of traffic which came with the business revival. How they endeavored to meet the unparalleled demands is reflected in the increased expenditures for maintenance of way and structures and equipment between 1898 and 1902, as follows:

	1898	1902	Per Cent Increase
Maintenance of Way and Structure .....	\$173,314,958	\$248,381,594	43.3
Equipment .....	142,624,860	213,380,644	49.6

But this only represents necessary improvements, repairs, extensions, additions, etc., to roadbed, track and rolling stock as charged to income account and takes no note of the enormous

additions made to capital account for the rehabilitation and modernizing of nearly all the great carrying roads of the country. Between 1898 and 1902 the railways only added 15,506 miles or 8 per cent. to their mileage. In the meantime over \$1,300,000,000 was added to their capital investment, as appears from the following (Statistics of Railways for 1902, pages 52-53) :

	Capital Stock	Funded Debt
1898 .....	\$5,388,368,321	\$5,430,285,710
1902 .....	6,024,201,295	6,109,981,669
	<hr/>	<hr/>
	\$ 635,932,974	\$ 679,695,956

By reason of the increased funded debt and to meet interest on \$852,402,622 bonds on which nothing was paid in 1898, the fixed charges of the operating railways, including taxes, have shown the following increase (Ib., p. 88) :

	Fixed Charges
1898 .....	\$359,690,671
1902 .....	458,986,436
	<hr/>
Increase .....	\$99,295,765
Per cent increase .....	27.6

In 1898 no less than \$3,570,155,239 of railway stock paid no dividends, and as late as 1902 the total non-dividend paying stock was \$2,686,556,614.

Beginning with 1898 the cost of everything entering into railway construction, maintenance, equipment and operation has advanced. In the one item of fuel for locomotives alone the expenses jumped from \$72,469,779 in 1899 to \$120,074,192 in 1902, an increase of almost 66 per cent. Ties which cost 45 cents apiece in 1898 advanced to 55 cents in 1902, were 60 cents in 1903 and are now 62 cents.

As showing how the price of railway labor has advanced relatively to the number of employes the following figures from the report of the Illinois Railroad and Warehouse Commission for the respective years, and covering 72,119 miles of operated lines and more than one-third of the railway employes in the United States have an important bearing on the necessity for a readjustment of railway tariffs to produce income commensurate to increased expenses:

Year Ending June 30	Total Employes	Total Yearly Compensation
1903 .....	443,700	\$264,927,792
1899 .....	283,979	164,972,143
	<hr/>	<hr/>
Increase .....	154,721	\$99,955,659
Increase per cent. ....	53.7	60.6

This difference of almost 7 per cent. between the increase in the cost of labor and the increase in the number of employes is all the more significant in view of the fact that the numerical increase was greatest in the ranks of the lower paid employes. Moreover, the effect of the advance in the wages of railway employes which took place in the summer of 1903 is not reflected in the figures for the fiscal year 1903, and its full force will not be ascertainable until those for the year ending June 30, 1904, are compiled, which, by the dilatory grace of the Interstate Commerce Commission, may be given to the public in July, 1905. However, the general effect is reflected in the current reports of the reductions in the number of employes and in other economies which every prudent railroad in the country feels compelled to make.

In Appendix C will be found a table giving the mileage, tons carried one mile, and rate per ton per mile for thirty-one of the leading railway systems of the United States for 1903 from "The Manual of Statistics," 1904 edition, and the rate per ton per mile for the same roads in 1899 from the same authority, 1900 edition. In it is represented 55 per cent. of the railway mileage of the United States and nearly 65 per cent. of the freight mileage. The average rate per ton shows an increase in 1903 over 1899 for eighteen of the roads, a decrease for twelve of the roads with one "standing pat," so to speak. The net effect of the changes in rates on 109,708,615,913 tons carried one mile figures out an increase of \$31,407,990 or about \$48,000,000 for the whole freight tonnage of the United States.

The most cursory examination of this table, however, shows that the entire net increase may be traced to the bed rock coal rates, which prevailed on the Baltimore and Ohio pending the receivership and reorganization of that system in 1899 and the gradual increase in the proportion of the general traffic to coal carried by the Pennsylvania and Erie systems between 1899 and 1903.

#### **Course of Railway Rates and Wholesale Prices of Commodities, 1899 to 1903.**

The March, 1904, Bulletin (No. 51) of the Bureau of Labor affords an admirable means of comparing the advance in railway rates between 1899 and 1902 with the relative price of each of nine groups of commodities during the same period. In order to obtain a base price to measure fluctuations, Carroll D. Wright, the editor of the government bulletin, takes the average price for the ten-year period, 1890 to 1899, and in

his comparisons this is represented by 100. By the same method the average rate per passenger per mile for the decade is found to be 2.051 cents and per ton per mile 1.839 cents. With 100 standing for these base rates the Railway Age in its issue of May 27, 1904, presented the following comparative statement:

**Percentages Showing Comparisons with Averages for 1890 to 1899.**

	1899	1902	Advance
Railway Rates-			
Passenger	93.9	96.8	2.9
Freight	86.3	90.2	3.9
Prices of Commodities			
Bulletin No. 51 page 248.			
Farm products	100.0	130.5	30.5
Food, etc.	98.3	111.3	13.0
Cloths and Clothing	96.7	102.0	5.3
Fuel and Lighting	105.0	134.3	29.3
Metals & Implements	114.7	117.2	2.5
Lumber & Building Material	105.8	118.8	13.0
Drugs & Chemicals	111.3	114.2	2.9
House furnishing goods	95.1	112.2	17.1
Miscellaneous articles	97.7	114.1	16.4
All Commodities	101.7	112.9	11.0

To reflect truly and adequately the conditions to which the increase of railway rates in 1900 was responsive, however, the comparisons should have included the year 1898 and been confined to those articles which enter so largely into the cost of maintaining and operating railways as follows:

**Percentages Showing Comparisons with Averages for 1890 to 1899.**

	1898	1902	Advance
Railway Rates-			
Passenger	96.2	96.8	0.6
Freight	89.7	90.2	0.5
Prices of Commodities-			
Fuel and lighting	95.4	134.3	38.9
Metals and implements	86.4	117.2	30.8
Lumber and Building material	95.8	118.8	23.0
Miscellaneous articles	92.4	114.1	21.7
All Commodities	93.4	112.9	19.5

Moreover, by 1903 the relative price of fuel had risen to 149.3, an advance of 53.9 points, of metals to 117.6, an advance of 31.2 points, of lumber to 121.4, an advance of 25.6, and of all commodities to 113.6, an advance of 20.2.

There can be no mistaking the significance of the above figures, all from government sources. They mean that while

railway rates for both passengers and freight are still far below the average rate for 1890 to 1899, the prices of all commodities have advanced more than 13 points above the average of that period, while fuel, metals and lumber were in 1903 from 25 to 53 points higher.

## THE INTERSTATE COMMERCE COMMISSION AND THE RAILWAYS.

Nothing in the growth of railway income, expenditures and the attendant conditions can equal the growth in the cost of the Interstate Commerce Commission which is shown in the following:

### Fiscal Year

1889 .....	\$149,729
1903 .....	294,842

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Increase .....	\$149,116
Per cent increase (almost) .....	100.

Except for \$34,265 expended under the "safety appliance appropriation," the above increase has been incurred without any additional duty or service being imposed on the Commission and without the present Commission fully realizing the broad and beneficent scope and wise limitations of its powers as laid down with perspicuous force and consistency in the first three Annual Reports, during the Chairmanship of the late Judge Thomas M. Cooley.

How admirably clear and comprehensive was the vision of the early Commission in recognizing the elements entering into the fixing of rates—that in addition to gross earnings they must include, operating expenses, through and local business, proportions to be borne by varied commodities, market values, quantities, diversity of traffic, commercial and industrial conditions and considerations, the relative cost of carriage as affected by bulk, weight, frailty, perishableness and size of the car load, speed of trains, remunerativeness, fidelity to railway interests as well as the public—is all reflected in the brief extracts from these reports given in Appendix D hereto.

In 1899 the railways were confronted by conditions they could not fail to grapple with and escape bankruptcy. The increased cost of maintaining, equipping, reinforcing, rebuilding and operating roads rendered an increase of revenue necessary. We have seen the enormous additions to capital account involving increased fixed charges. How and whence the increase of income should come was solely a question of

judgment as to where rates could be increased and where reduced; where the changes would be least onerous to the public and most productive to the carrier—two interdependent conditions. When the rate-maker meets them both successfully he fulfills the highest requirements of his office and is a public benefactor.

If as Auditor Smith estimates the income of the railways in 1903 was increased \$155,475,502 by reason of the changes in classifications and rates in 1900 and since, it would merely vindicate the wisdom as well as the necessity for such changes, as appears from the following:

Railway Dividends, 1903 . . . . .	\$159,310,010
Auditor Smith's estimate increase . . . . .	155,475,502
	<hr/>
Balance . . . . .	3,834,508

Without Mr. Smith's estimated increase in 1903—the phenomenal year of American prosperity—the \$6,024,201,295 capital stock of American railways would have paid a fraction over 6/100 of 1 per cent.! Or to put it more succinctly it would not have paid a 4 per cent. dividend on 2 per cent. of the capitalization of American railways.

If such would have been the conditions but for the readjustment of rates between 1899 and June 30, 1903, what would have been the financial straits of the railways to-day when the returns for the first quarter of 1904 according to the Financial Chronicle (May 21, '04) make the following showing:

	January 1 to March 31 101 Roads	
	1904	1903
Gross earnings . . . . .	\$364,827,074	\$367,987,332
Operating Expenses . . . . .	274,744,003	261,641,584
Net Earnings . . . . .	90,083,071	106,345,748
Decrease in earnings . . . . .		3,160,258
Increase in Operating Expenses . . . . .		13,102,419
DECREASE IN NET EARNINGS . . . . .		16,262,677

These figures represent about 80 per cent of the earning capacity of all the railways and are a fair index to conditions which rate makers must meet to prevent a repetition of the experiences of 1894.

## EXPERT BRITISH VIEW OF AMERICAN RAILWAYS.

In closing this review of the perversion and suppression of facts and mistaken estimates of Document No. 257, I cannot do better than contrast its whole tenor with the words of Neville Priestley, Under Secretary to the government of India (Railway Department), in his recent official report. "On the Organization and Working of Railways in American" (government publication, 1904), in which he says:

"The present prosperity of the United States of America is in no small extent due to the low rates charged for transportation. This prosperity has reflected itself in an increase of wages all round which in its turn has increased consumption and consequently production. These high wages are not due to the necessities of life costing the laboring classes in American more than they cost the same class in England. It is only the style of living which is better. At the back of it all there is no doubt the Protective Tariff, but **that would have availed little without the cheaping of the cost of transportation.** \* \* \*

"In India, pooling and the territorial division of traffic are permitted and railways are not only allowed but are encouraged to protect themselves against competition. American railways enjoy no such protection (any act which tends to restrict competition is illegal), but have been left to work out their own salvation as best they could. They have consequently been obliged to devote their efforts to reducing the cost of transportation, and the great bulk of the traffic can now be carried at rates which a few years ago were held to be impracticable and spelt bankruptcy. \* \* \*

"Previous to the lowering of the rates by competition, consumption of many commodities was confined to a limited class of people, and to that class in a limited quantity. The lowering of rates brought these commodities not only within the reach of a wider class of consumers but enabled the previous consumers to increase their consumption.

"To restore the railways to solvency, it was not possible to put up rates, even if this had been desirable with the experience before them, and the railway officials were forced to devise methods which would permit their carrying the traffic at these low rates and at the same time earn a dividend for the stockholders. The alert American mind was not long in devising those methods, and to-day **railway rates for goods traffic,**



judged as a whole, are lower in America than in any other country in the world. \* \* \*

"They (American railway men) have managed to do what no other country in the world has done, and, that is, carry their goods traffic profitably at extraordinary low rates **notwithstanding the fact they pay more for their labor than any other country.**"

This sounds like an echo of the just appreciation of the work American railways were doing which pervaded the early reports of the Interstate Commerce Commission under the chairmanship of Thomas M. Cooley.

SLASON THOMPSON.

Chicago, July, 1904.

## APPENDIX A.

58TH CONGRESS, }  
 2d Session. }

SENATE.

{ DOCUMENT  
 { No. 257.

ADVANCE IN FREIGHT RATES, ETC.

**LETTER FROM THE INTERSTATE COMMERCE COMMISSION TRANSMITTING, IN RESPONSE TO SENATE RESOLUTION OF MARCH 11, 1904, A REPORT OF THE COMMISSION RELATIVE TO THE ADVANCE IN FREIGHT RATES AND THE RESULTING INCREASE IN REVENUE OF THE RAILWAY CORPORATIONS OF THE UNITED STATES DURING EACH OF THE FISCAL YEARS ENDING JUNE 30, 1900, 1901, 1902, AND 1903, AND ALSO A REPORT SHOWING THE CHANGES IN COST AND MAINTENANCE OF SAID RAILWAYS FOR SAID YEARS.**

APRIL 9, 1904.—Referred to the Committee on Interstate Commerce and ordered to be printed.

INTERSTATE COMMERCE COMMISSION,  
*Washington, April 7, 1904.*

SIR: The Interstate Commerce Commission herewith respectfully submits the following report in compliance with the resolution of the Senate of the United States, adopted March 11, 1904, which reads:

*Resolved*, That the Interstate Commerce Commission is hereby directed to furnish the Senate, as speedily as may be practicable, a report showing the principal changes in railway tariff rates, whether resulting from the adoption of new rates or the amendment of freight classifications, and an estimate of the effect of such changes upon the gross and net revenues of railway corporations in the United States during each of the fiscal years ending June thirtieth, nineteen hundred, nineteen hundred and one, nineteen hundred and two, and nineteen hundred and three, as compared with the gross and net revenue that would have been derived by them under the rates and freight classifications in force during the fiscal year ending June thirtieth, eighteen hundred and ninety-nine; and also report the changes in cost of operation and maintenance of said railways for said years.

A statement prepared by the auditor of the Commission shows the principal changes in rates caused by changes in freight classification and the advances in rates on a number of specified commodities. Most of these changes took place during the year 1900, but some commodity rate changes occurred between that year and the end of 1903. For the reasons indicated in the statement no more specific or comprehensive account of rate changes can be given.

The resolution directs the Commission to furnish an estimate of the effect of such changes in rates upon the gross and net revenues of railway corporations in the United States during each of the fiscal years ending June 30, 1900, 1901, 1902, and 1903, basing the comparisons upon the gross and net revenues they would have derived in those years under rates in force during the fiscal year ending June 30, 1899. As far as practicable the statement of the auditor is in conformity with such requirement, and following this statement is a table showing, for each of the years mentioned, what the gross revenue of the railways would have been if the average rate per ton received by all the railways in the fiscal year 1899 had been applied to the tonnage carried over such railways in the succeeding fiscal years to and including 1903. As to a few staple commodities the increase in revenue due to advanced rates in effect during specified periods is estimated in the statement mentioned substantially in accordance with the method of calculation directed in the resolution.

No similar calculation can be made respecting net revenue for the reason that the net revenue of a railway depends not merely upon gross earnings, but also upon cost of operation, which may be varied by numerous conditions, including the density of traffic as well as the aggregate tonnage.

From what has been stated it must appear that no accurate or even approximate estimate of the actual effect of specific changes in rates upon the revenues of the carriers can be made. The best that can be done is to indicate the rate changes, and then, without using them as factors, show by yearly tonnage and earnings and the average rate per ton for the year 1899 results similar in character to those called for by the resolution. This method of computation is not without value as indicating enormous additions in recent years to the cost of railway transportation to the people of the United States.

The statement and table above mentioned constitute Part I of the appendix hereto.

The resolution also directs the Commission to report the changes in cost of operation and maintenance of United States railways for the years therein mentioned. Except for the fiscal year ending June 30, 1903, this information is contained in a table prepared by the statistician of the Commission, which will be found herewith as Part II of the appendix. The returns for the fiscal year 1903 have not yet been compiled, and the figures relating to the cost of operation and maintenance for that year must therefore be omitted from this report.

All of which is respectfully submitted.

MARTIN A. KNAPP, *Chairman.*

THE PRESIDENT OF THE SENATE OF THE UNITED STATES.

## APPENDIX.

## PART I.

INTERSTATE COMMERCE COMMISSION,  
OFFICE OF THE AUDITOR,  
Washington, March 24, 1904.

*Memorandum.—Senate resolution, dated March 11, 1904, relative to advance in freight rates and the resulting increase in revenue of the railway corporations of the United States.*

The freight traffic of the railways of the United States is carried under two general classes of schedules known as "class tariffs" and "commodity tariffs." The latter name specific rates on certain commodities, such as grain, lumber, coal, live stock, dressed meats, fertilizers, etc. In the absence of commodity rates the regular class tariffs apply. In these tariffs the rates are arranged in classes and are used in connection with a freight classification, which indicates the class to which any given article belongs. Where an article is changed from one class to another the effect therefore is to change the rate of transportation upon that article.

For many years there have been three general freight classifications in use throughout the United States, namely, the official classification, which governs the class rates generally in the territory north of the Ohio and Potomac rivers and east of the Mississippi river and Lake Michigan; the Southern classification, which governs generally in the territory south of the Ohio and Potomac rivers and east of the Mississippi river, and the Western classification, which governs generally in the territory west of the Mississippi river and also applies on traffic between Chicago, Peoria, and certain other points east of the river and points west thereof.

On January 1, 1900, official classification No. 20 became effective. This classification made many advances in ratings over the previous classification (No. 19), which was in force prior to the date mentioned. The total number of ratings advanced was 818, but it was found that there were many duplications, the same article being classified more than once in different parts of the classification, and that such duplications amounted to about 30 per cent. of the total number. The actual number of advances was 572, as follows:

Ratings	Advanced—	
	From Class—	To Class—
289	4	3
155	3	2
71	6	5
25	2	1
15	5	4
8	1	1½
5	1	D 1
2	1½	D-1
1	D-1	2½
1	4	2
572		

In the same classification (No. 20) there were six reductions in rating.

On March 10, 1900, most of the articles which had been advanced on January 1 from fourth to third class were reduced to 20 per cent. less than third class, and most articles which on same date had been advanced from third to second class were reduced to 15 per cent. less than second class, and these ratings still remain in force.

Prior to February 1, 1900, Southern classification No. 25 had been for some time in force. There were three issues of this classification during the year 1900, namely, No. 26, effective February 1; No. 27, effective June 1; and No. 28, effective November 10. By comparing the last with No. 25 it was found that 636 changes were made during the year, of which 531 were advances and 105 reductions in rating.

Western classification No. 30, which became effective January 25, 1900, superseding No. 29, which took effect July 1, 1899, made 257 changes in rating, of which 240 were advances and 17 were reductions.

These classification changes were quite fully set forth in the annual report of the Commission for the year 1900. A number of issues of each of the classifications referred to have been made since the year 1900, but the changes made in such issues were comparatively few and were not of such importance as to deserve special notice.

As before indicated, all traffic which is carried at class rates throughout the United States is carried under one or more of the three general classifications above described. All of the thousands of railroad points throughout the country are therefore more or less affected by these classification changes, but in order to form an estimate which would be of any value as to the amount of increase in the revenues of the railways as a result of such advances in classification, it would be necessary to be in possession of some knowledge, not only as to the separate tonnage carried of each of the articles affected, but as to the points between which they were carried as well. This information is not available, and even if it could be obtained the undertaking would be so enormous as to render it virtually impracticable.

The annual reports filed with the Commission by the common carriers under section 20 of the act to regulate commerce show the total tonnage of all freight carried and the total freight revenue derived therefrom; but with the exception of a few important commodities, such as coal, ores, forest products, etc., the separate tonnage of the articles transported is not shown, and in the cases of the exceptions referred to the points between which such articles are carried are not stated. The following table shows the total tonnage and freight revenue of all the railways in the United States for the years ending June 30, 1899, 1900, 1901, 1902 and 1903, with the average rate per ton for each year, except that the figures given for the year

last named represent about 98 per cent. of the total operated mileage:

Year ending June 30—	Total number of tons of freight carried.	Total freight revenue.	Average rate per ton.
1899.....	959,763,583	\$913,737,155	\$0.9520
1900.....	1,101,680,238	1,049,256,323	.9524
1901.....	1,089,226,440	1,118,543,014	1.0269
1902.....	1,200,315,787	1,207,228,845	1.0058
1903.....	1,221,475,948	1,318,320,604	1.0793

Attached hereto is a statement showing the actual tonnage and freight revenue for the years named, and also what the total freight revenue would have been for each of the fiscal years subsequent to that ending June 30, 1899, at the average rate per ton which prevailed that year, also the increase in revenue for such subsequent years resulting from the higher average rate per ton. It is believed that such a statement gives a more accurate idea of the increased revenue resulting from an advance in freight rates and classifications than can be obtained in any other way. The figures given include the tonnage and also the revenue derived from both class and commodity rates, there being no way of showing these items separately.

It should be borne in mind, in connection with this statement, that the average rate per ton and the average rate per ton per mile, being determined from the tonnage carried and the revenue derived therefrom, and not from the tariffs, would vary somewhat for different years without any change being made in the tariff rates, such variation being due to the difference in the relative quantity of the various classes of freight carried. For instance, should there be a marked increase in the percentage of tonnage of low-grade freight for any given year over the preceding year, the average rate per ton and the average rate per ton per mile would show a decrease for the later, as compared with the previous year, based on the same tariff rates. It may be said that there is a constant tendency toward an increase in the percentage of the tonnage of low-grade freight, so that if there had been no advances in rates or classification since the year ending June 30, 1899, it is safe to say that the average rate per ton for each of the subsequent years would have been somewhat less than for that year.

The increase in the average rate per ton, for the year ending June 30, 1900, over the previous year was quite small, being only four one-hundredths of a cent per ton, and by reference to the statement it will be seen that the increase in revenue for that year over the preceding year was only \$456,736. For the year ending June 30, 1901, the increase in the average rate per ton over the year ending June 30, 1899, was 7.49 cents, the difference in revenue being \$81,599,443. The average rate per ton for the year ending June 30, 1902, was \$1.0058, being 5.38 cents greater than the average rate for the first-mentioned year, but a little over 2 cents per ton less than for the preceding year. The difference in revenue for this year over

what would have been produced by the average rate of the first year in question was \$64,528,216. The falling off in the average rate per ton appears to have been due to a large increase in low-grade tonnage in 1902 over the preceding year. For instance, in the items of coal, coke, and ores alone, there was an increase in tonnage for this year over the preceding year of nearly 30,000,000 tons.

For the year ending June 30, 1903, it will be seen there was a large increase in both tonnage and revenue over any of the previous years mentioned, the increase in revenue, however, being relatively much greater than the increase in tonnage. The average rate per ton for this year was \$1.0793, or nearly 12 $\frac{3}{4}$  cents per ton greater than the average rate per ton for the year ending June 30, 1899, this difference amounting in revenue to \$155,475,502 over what it would have been at the average rate of the first-mentioned year.

In the reports of the Commission on the Statistics of Railways in the United States, compiled from the annual reports of the carriers filed under section 20 of the act to regulate commerce, the railways of the country are divided into ten territorial groups, the tonnage, revenue, etc., for each group being separately shown. As heretofore indicated, the annual reports of the carriers show the tonnage of a few important commodities separately, and while the separate revenue derived therefrom and the points between which the articles are carried are not given, where advances in rates have been made on any of these commodities it is possible to form an estimate of the increase in revenue resulting from such advances which no doubt, while considerably at variance with the actual figures, were they obtainable, will give a fair idea as to the increase in revenue resulting from an advance in rates on such articles.

In the territory governed by the official classification, heretofore described, both hay and sugar in carloads were advanced January 1, 1900, from sixth to fifth class. Between New York and Chicago this advance amounts to 5 cents per 100 pounds, or \$1 per ton. Between New York and the territory lying between that point and Chicago the advance would be less, in some cases as low as 40 cents per ton, while in the territory west of Chicago and east of the Mississippi River the advance would be in some instances as high as \$1.50 per ton. An average advance of 80 cents per ton on these two commodities in official classification territory, it is believed, is a fair estimate.

The total tonnage of hay reported by originating roads for the years ending June 30, 1900, 1901, and 1902, was as follows:

	Tons.
1900.....	4,112,092
1901.....	4,086,700
1902.....	4,681,509

The figures giving the separate tonnage of this commodity for the year ending June 30, 1903, are not yet available.

It is calculated from the statistical reports of the Commission that

of the total tonnage carried by the railroads of the United States about 65 per cent is carried in the territory governed by the official classification. Taking the total tonnage of hay for the last year mentioned (1902), namely, 4,681,509 tons, 65 per cent. thereof would be 3,042,980 tons. Based on an average advance of 80 cents per ton in rate, the increase in revenue for that year would be \$2,434,384, and from January 1, 1900, to the present time, during which the advanced rates have been in force nearly \$10,000,000. There was no advance in the classification of hay in the southern and western classifications.

The total tonnage of sugar originating on reporting roads for the same years was as follows:

	Tons.
1900.....	2,050,558
1901.....	2,301,932
1902.....	2,254,571

The classification of sugar, as before stated, was advanced in the official classification territory at the same time as hay (January 1, 1900), and to the same extent, namely, from sixth to fifth class, the increase between New York and Chicago being 5 cents per 100 pounds, or \$1 per ton. Taking 65 per cent. as the proportion of the total tonnage carried in the official classification territory, we have for the year ending June 30, 1902, 1,465,471 tons. On basis of an average advance of 80 cents per ton, the increase in revenue for that year would be \$1,172,376, and from January 1, 1900, to the present time, during which the advanced rates have been in force, something over \$4,500,000.

In the western classification no advance was made in the classification of sugar, while in the southern it was advanced from sixth to fifth class. In the latter territory, however, sugar shipped from the regular shipping points, such as New Orleans, La., and Mobile, Ala., is almost invariably carried at commodity rates. It does not appear that any general advance has been made in these rates, and recently material reductions have been made.

On January 1, 1900, when the carload rating of hay and sugar was advanced, the carload rating on about 70 other articles was also advanced from the sixth to the fifth class in the official classification, but there is no way of arriving at even an estimate of the tonnage of these articles, and no estimate can, therefore, be made as to the increased revenue resulting from the advance in classification of such articles.

At the beginning of the year 1903 the rates on all iron and steel articles were advanced 10 per cent. in the territory governed by the official classification. The annual reports of the carriers do not appear to include all iron and steel articles in the table which gives the separate tonnage for particular commodities. According to the reports for the year ending June 30, 1902, the total tonnage of iron and steel articles originating on reporting roads was as follows:



	Tons.
Iron, pig and bloom.....	14,714,989
Iron and steel rails.....	4,849,255
Other castings and machinery.....	9,696,433
Bar and sheet metal.....	10,624,712

Machinery is not included in the list of iron and steel articles and does not take the same rates. The third item, as given above, must therefore be eliminated. The total of the other three items is 30,188,956 tons. Taking 65 per cent. of this as the tonnage carried in official classification territory we have 19,622,821 tons. The advance ranged from about  $\frac{1}{2}$  to  $1\frac{1}{2}$  cents per hundred pounds. The average was probably about 1 cent per hundred pounds, or 20 cents per ton. Assuming the tonnage of these articles for the year 1903 to be not less than for 1902, the increased revenue thereon for that year, owing to the advance in rates, would be about \$4,000,000.

The total tonnage of bituminous coal for the year ending June 30, 1902, was 154,402,501 tons. There appear to have been few important changes in the rates on this commodity in southern and western territory since January 1, 1900. In the territory north of the Ohio and Potomac rivers and east of the Mississippi River advances were made in the early part of 1903 which probably averaged 10 cents per ton. Again, taking 65 per cent. of the entire tonnage as the amount carried in this territory, we have 100,361,625 tons. Based on the tonnage of this commodity for 1902, the increase in revenue for 1903, at an average advance of 10 cents per ton, would be a little over \$10,000,000. There appear to have been no material advances in the rates on anthracite coal during the period in question.

In June, 1903, the rates on lumber and other forest products from all lumber-producing points in the southern territory east of the Mississippi River to Ohio River points, and points north thereof; also from points in Arkansas, Louisiana, and Texas to the same territory were advanced 2 cents per 100 pounds. For the year ending June 30, 1902 (figures for 1903 not yet available), the total tonnage of lumber and other forest products was 67,703,050 tons, of which it is estimated that about 20,000,000 tons originated in the territory above described. Assuming that there has been no falling off in tonnage, the increase in revenue for the nine months the advanced rates have been in force, at an advance of 2 cents per 100 pounds, or 40 cents per ton, would be about \$6,000,000.

Grain and grain products constitute an important part of the freight traffic of the country, the tonnage for the year ending June 30, 1902, being 36,813,857 tons. The fluctuation in the rates on these commodities during the last four years, however, has been such as to render an estimate of the effect of such changes on railway revenue impracticable. The rates on this traffic for a large portion of the country are based on the rates from Chicago to New York. The following table shows the changes in the rates on wheat and

flour, carloads, from and to the points named, since January 1, 1900, to the present time:

	Cents per 100 pounds.
January 1, 1900.....	22
March 5, 1900.....	15
November 1, 1900.....	17½
June 1, 1901.....	15
October 21, 1901.....	17½
December 8, 1902.....	20
May 11, 1903.....	13
December 1, 1903, to present date.....	20

As will be seen, the rate in force January 1, 1900 (which became effective November 1, 1899), was higher than at any subsequent date, while for a considerable portion of the time the rates on this traffic were on basis of 15 cents per 100 pounds Chicago to New York.

Respectfully submitted.

J. M. SMITH,  
Auditor.

*Statement showing the total number of tons of freight carried by the railroads of the United States for the fiscal years ending June 30, 1899, 1900, 1901, 1902 and 1903, with the total revenue accruing therefrom; also the revenue which would have accrued at the average rate of 95.2 cents per ton for the years ending June 30, 1900, 1901, 1902, and 1903, this being the average rate for the year ending June 30, 1899; and the increase in the revenue for the years 1900, 1901, 1902, and 1903 resulting from the increase in the average rate per ton for those years.*

Year ending June 30—	Number of tons of freight carried.	Total freight revenue as charged.	Amount of freight revenue at average rate per ton of 95.2 cents, being the average rate for the year ending June 30, 1899.	Increase.
1899 .....	959,763,583	\$913,737,155	\$913,737,155	.....
1900 .....	1,101,680,238	1,049,256,323	1,048,799,587	\$ 456,736
1901 .....	1,089,226,440	1,118,543,014	1,036,943,571	81,599,443
1902 .....	1,200,315,787	1,207,228,845	1,142,700,629	64,528,216
1903a .....	1,221,475,948	1,318,320,604	1,162,845,102	155,475,502

aThe figures given for the year 1903 represent about 98 per cent of the total mileage.

## PART II.

*Summary showing gross earnings, operating expenses, ratio of operating expenses to earnings, mileage operated, etc., of the railways in the United States, for the years ending June 30, 1899, 1900, 1901, and 1902.*

Item.	1899			1900			Increase 1900 over 1899	
	Amount.	Proportion to total operating expenses.	Per mile of line operated.	Amount.	Proportion to total operating expenses.	Per mile of line operated.	Amount	Per cent.
		<i>Per ct.</i>			<i>Per ct.</i>			
Gross earning from operation .....	\$1,313,610,118	.....	\$ 7,005	\$1,487,044,814	.....	\$ 7,722	\$173,434,696	13. 20
Operating expenses:								
Maintenance of way and structures..	180,410,806	21. 05	962	211,220,521	21. 97	1,097	30,809,715	17. 08
Maintenance of equipm't	150,919,249	17. 62	805	181,173,880	18. 84	941	30,254,631	20. 05
Conducting transportation .....	486,159,607	56. 73	2,593	529,116,326	55. 04	2,748	42,956,719	8. 84
General expenses .....	38,676,883	4. 51	206	39,328,765	4. 09	204	651,882	1. 69
Unclassified ..	802,454	.09	4	589,019	.06	3	213,435	26. 60
Total operating expenses ..	856,968,999	100. 00	4,570	961,428,511	100. 00	4,993	104,459,512	12. 19
Percentage of operating expenses to earnings ...	65. 24	.....		64. 65	.....			
Mileage operated (single track) miles	187,534.68	.....		192,556.03	.....			

Item.	1901			Increase 1901 over 1900	
	Amount.	Proportion to total operating expenses.	Per mile of line operated.	Amount.	Per cent.
		<i>Per ct.</i>			
Gross earnings from operation .....	\$1,588,526,037	.....	\$ 8,123	\$101,481,223	6. 82
Operating expenses:					
Maintenance of way and structures.....	231,056,602	22. 42	1,182	19,836,081	9. 39
Maintenance of equipment .....	190,299,560	18. 46	973	9,125,680	5. 04
Conducting transportation .....	565,265,789	54. 87	2,890	36,149,463	6. 83
General expenses .....	42,566,553	4. 13	218	3,237,788	8. 23
Unclassified .....	1,208,766	.12	6	619,747	105. 22
Total operating expenses .....	1,030,397,270	100. 00	5,269	68,968,759	7. 17
Percentage of operating expenses to earnings .....	64. 86	.....			
Mileage operated (single track) .. miles ..	195,561.92	.....			

a Decrease

## Summary showing gross earnings, operating expenses, etc.—Continued.

Item.	1902			Increase, 1902 over 1901.	
	Amount.	Proportion to total operating expenses.	Per mile of line operated.	Amount	Per cent.
Gross earnings from operation . . . . .	\$1,726,380,267	Per ct.	\$ 8,625	\$137,854,230	8.68
Operating expenses:					
Maintenance of way and structures . . . . .	248,381,594	22.25	1,241	17,324,992	7.50
Maintenance of equipment . . . . .	213,380,644	19.12	1,066	23,081,084	12.13
Conducting transportation . . . . .	609,961,695	54.64	3,047	44,695,906	7.91
General expenses . . . . .	44,197,880	3.96	221	1,631,327	3.83
Unclassified . . . . .	326,934	.03	2	a881,832	a72.95
Total operating expenses . . . . .	1,116,248,747	100.00	5,577	85,851,477	8.33
Percentage of operating expenses to earnings . . . . .	64.66				
Mileage operated (single track) . . miles . . . . .	200,154.56				

aDecrease.

End of Senate Document No. 257.

## ADDENDA.

WHAT SENATE DOCUMENT NO. 257, SHOULD HAVE CONTAINED, BUT DID NOT.

*Summary showing gross earnings, operating expenses, ratio of operating expenses to earnings, mileage operated, etc., of the railways of the United States for the years ending June 30, 1899 and 1903, and the percentage of increase in each item in four years.*

Item.	1899 (See Part II above.)	1903 (See Final Re- port, I. C. C.)	Increase 1903 over 1899.	
	Amount.	Amount.	Amount.	Per cent.
Gross earnings from operation .....	\$1,313,610,118	\$1,900,846,907	\$587,236,889	44.7
Gross earnings per mile of line .....	7,005	9,258	2,253	32.1
Operating expenses:				
Maintenance of way and structure . . .	180,410,806	266,421,774	86,010,968	47.7
Maintenance of equipment .....	150,919,249	240,429,742	89,510,493	59.3
Conducting transportation .....	486,159,607	702,509,818	216,450,211	44.5
General expenses .....	38,676,883	47,767,947	9,091,064	23.5
Unclassified .....	802,454	409,571	392,683	48.8
Total operating expenses .....	856,968,999	1,257,538,852	400,569,853	46.7
Per mile of line .....	4,570	6,125	1,555	34.0
Percentage of operating expenses to earn- ings .....	65.24	66.16	.92	.....
Mileage operated (single track) . . . miles	187,534.68	207,977.22	20,442.54	10.9
Employees number .....	928,924	1,312,537	383,613	41.3
Employees' compensation .....	522,967,896	775,321,415	252,353,519	48.2

The column showing the per cent. of increase, 1903 over 1899, is the best possible refutation of all charges that the railways have not been justified in readjusting freight rates to meet the advancing cost of operation, "as a means to preserve the property placed under their control," as official statistician Adams would say. That the warning of these percentages is not still more emphatic, is due to great economies through able management and the enormous sums expended out of income and capital account to meet the phenomenal demands of American agricultural, industrial and social conditions for the ~~cheapest and best~~ railway transportation in the world.

S. T.

*The column  
in years*

## APPENDIX B.

**Typical Memorandum Showing Changes in Freight Rates on  
Atlantic Coast Line Railroad During the Four Years  
Ending June 30, 1903.**

	Perc'tage of Total Earnings	Perc'tage of Total Tonnage	Advances or Reductions	Preponderance If both Advances and Reductions
<b>PRODUCTS OF AGRICULTURE.</b>				
Flour, Grain, Hay and other Mill products . . .	7.9	6.92	Both	Reductions
Tobacco . . . . .		.85	Reductions	
Cotton . . . . .	6.1	2.88	Reductions	
Fruit and Vegetables . . .	8.4	3.53	Reductions	
<b>PRODUCTS OF ANIMALS</b>				
Live Stock . . . . .		.34	Reductions	
Packing House Products . .	1.4	.92	Both	Reductions
Wool, Hides & Leather . . . .		.06	Both	Advances
<b>PRODUCTS OF MINES</b>				
Coal and Coke . . . . .	1.1	2.63	Reductions	
Stone and Sand . . . . .		2.06	Reductions	
Phosphate Rock . . . . .	7.2	14%	Reductions	
<b>PRODUCTS OF FOREST</b>				
Lumber . . . . .	15.1	23.42	Both	Reductions
Logs . . . . .		5.19	Both	Reductions
Wood . . . . .		4.05	Reductions	
Crossties . . . . .	1.1	2.40	Both	Reductions
<b>MANUFACTURES</b>				
Petroleum and oils . . . . .		1.09	Advances	
Fertilizer . . . . .	7.1	8.93	Reductions	
Sugar . . . . .		.25	Both	Reductions
Naval stores . . . . .	3.5	3.82	Reductions	
Rails, pig iron, etc. . . . .		1.05	Advances	
Castings and Machinery . .	1.4	.81	Both	Reductions
Brick, Cement and Lime . .	1.2	2.81	Reductions	
Cotton Factory Products . .	1.2		Both	Reductions
Vehicles, H-H goods and Furniture . . . . .		.47	Reductions	
<b>MISCELLANEOUS COMMOD- ITIES.</b>				
GENERAL MERCHANDISE . . . .		6.51	Both	Reductions
<b>Total</b> . . . . .		<b>100.00</b>		

NOTE: The percentages shown above are based upon statistics for the year 1903.

## APPENDIX C.

**Comparative Statement of Mileage, Tonnage and Rate per Ton  
per Mile of 31 Leading American Railways  
in 1899 and 1903.**

	Mileage	Tons Carried One Mile 1903	Rate per Ton 1903 Cents	Rate per Mile 1899 Cents
A. T. & S. F.	7965	4,705,540,965	0.948	1.019
B. & O.	3935	8,584,536,190	0.556	0.390
B. & M.	2282	1,726,029,176	1.130	1.430
Cent. of Ga.	1845	577,561,852	1.091	1.044
C. & O.	1641	2,631,297,190	0.475	0.362
Chi. & E. I.	751	1,936,651,087	0.450	0.435
“ & N-W.	6332	4,029,840,841	0.870	0.870
“ B. & Q.	8318	4,931,185,014	0.868	0.861
“ M. & St. P.	6646	4,021,775,419	0.865	0.937
“ R. I. & P.	6978	2,987,577,497	1.000	0.990
“ St P. M. & O.	1605	849,645,417	0.960	0.967
C. C. C. & St. L.	1891	2,055,117,031	0.644	0.541
Erie	2153	5,407,350,489	0.612	0.517
Grt. North.	5489	3,606,835,176	0.857	0.916
I. C.	4276	5,176,543,778	0.591	0.688
L. & N.	3348	3,413,321,406	0.779	0.729
M. K. & T.	2601	1,382,372,329	0.959	0.934
M. Pacific	5845	4,160,335,311	0.822	0.844
N. Y. C. & H. R.	3422	7,366,768,599	0.640	0.590
N. Y., N. H. & H.	2027	1,627,858,848	1.414	1.411
N. & W.	1713	3,639,684,856	0.485	0.397
N. P.	5111	3,515,942,943	0.850	1.047
Penn.	3723	14,858,077,652	0.605	0.499
Reading (traffic)	1010	1,298,347,435	0.967	0.951
“ (coal)		1,925,862,021	0.682	0.687
St. L. & S. F.	3675	1,749,996,697	0.995	1.019
“ S. West.	1291	502,219,465	1.100	1.210
Sou. Pac.	8842	5,035,409,849	1.022	0.947
“ Ry.	7129	2,954,717,921	0.950	0.897
Wabash	2483	2,413,102,148	0.606	0.553
Wis. Cent.	977	737,111,311	0.682	0.731
	116322	109,708,615,913		
Same roads 1899	94818	74,245,353,369		
Increase	21504	35,463,262,544		

“ per cent 22.6

47.7

## APPENDIX D.

### Extracts from Early Reports of the Interstate Commerce Commission on Rates and Classifications.

Conditions change from month to month, the classification cannot be permanently the same, but must be subject to modification on the same grounds on which it was originally made: the appeals for modification would be as numerous as they would be perplexing, because of the diversity of reasons on which they would be grounded. --First Annual Report (discussing practicability of uniform classification), p. 32.

Railroad managers very soon discovered that they could not measure their rates exclusively by the standard of cost of carriage of the several kinds of traffic, separately considered, but it was wise for themselves and best for the country that the cost of carriage be considered in the aggregate and that the rates which are to be the compensation for the service performed be then apportioned on special consideration of the value of the service to the kinds of traffic severally. Such an apportionment would seldom be burdensome to articles of high value, but it would relieve cheaper articles from burdens which apportioned strictly to the cost of the carriage of their transportation, would render carriage for considerable distances out of the question. --Second Annual Report (discussing same); p. 35.

The carriers, it may be assumed, have primarily consulted their own interests, but they have also at the same time consulted the local feeling and the local interests, and have commonly found that **their own interests were best subserved in doing so.**—Ib., p. 35.

It has seemed to many persons that to unify classifications must be a very simple task. But those most familiar with the subject of classification will be least inclined to look upon the making of a uniform classification as a very simple affair. It is very far from being a simple affair. It is, on the contrary, as difficult a task as under the ordinary operations of government is likely to be devolved on any person or any body of men. In its nature it corresponds closely to the making of the customs tariff for the country, but the necessity for the going into particulars may be greater, for classification must reach every article of ordinary commerce, and it must be framed on the understanding that for every one some burden is to be provided, though among them all there may be apportionment of burdens on some principle adjusted to the general good.—Ib., p. 38.

All existing classifications have resulted from many compromises. Pacific coast and Texas interests have compromised with those of the interior in the recent extensions of the Western



classification, and they would probably be forced to compromise further if the Official and the Western classifications were merged. But no one intrusted with the task of merging them would be excusable for making the attempt without better information to act upon than can be obtained from a few witnesses summoned to Washington to give it.—Ib., p. 39.

They (the carriers) have knowledge of the local interests which are represented in existing classifications, and their practical experiences gives them special fitness for the task. Moreover, this course will have the further advantage that if complaints are made of the classifications the Commission will come to their consideration **with minds unembarrassed and uncommitted by previous action of their own.**—Ib., p. 40.

Railroads, as the necessary highways of the country, are expected to keep in view the purpose for which their franchises were granted, and, while guarding their revenues with fidelity to their corporate interests, to make the public service their constant aim, and to so manage their affairs that the service shall be impartial and reasonable.—Third Annual Report, p. 84.

In determining what is a just and reasonable rate for a particular commodity the Commission will take into consideration the earnings and expenses of operating \* \* \* the relative amount of through and local business, the proportion borne by the commodity in question to the remainder of the local traffic, the market value of the commodity, etc.

Evans vs. Oregon Ry. & Nav. Co.

Reed vs. Same, Report 1889, p. 229.

A question of reasonable rates cannot be properly decided without full knowledge of all the facts concerning the particular traffic in question and its relation to the other traffic of the carrier. Profitable rates may not be unjust.

Howell et al. vs. N. Y. L. E. & W. Ry. et al., Ib., p.

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$$\begin{array}{r}
 380 \\
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 312 \\
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 104 \\
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 3500 \\
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 26 \\
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 4
 \end{array}$$

45

$$\begin{array}{r}
 50 \\
 \hline
 38 \\
 \hline
 10
 \end{array}$$

70



350

$$\begin{array}{r}
 417 \\
 \hline
 360 \\
 \hline
 50
 \end{array}$$



13 1-